

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 10-297039 in view of JP 4-58355, as cited by applicant.

Regarding claim 1, the JP '039 reference teaches an image forming apparatus, comprising:

- a sheet transport path, see arrow in figure 5, leading from a sheet feeding section through an image forming position to a sheet ejecting section;
- a lower sheet ejecting roller, 34, arranged in the sheet ejecting section below the sheet transport path; and
- an upper sheet ejecting roller, 36 and 37, arranged above the sheet transport path so as to be in direct contact with the lower sheet ejecting roller see figures 5 and 6,
- wherein the upper sheet ejecting roller is divided in a direction perpendicular to a sheet transport direction into a plurality of portions and the portions are in direct contact with the lower sheet ejecting rollers at respective points in the sheet transport direction, see figure 3,
- wherein the two upper roller of the JP '039 reference are not in the same straight line parallel to the sheet transport direction, see figure 3.

The JP '039 reference teaches all of the features of the claimed invention except for an upper sheet ejecting roller which comprises 3 different rollers, the JHP '039 reference teaches a roller comprising two different roller which are in direct contact with the lower sheet ejecting roller.

The JP '355 reference, however, teaches a lower sheet ejecting roller, 17a, and upper sheet ejecting roller which comprises at least three different rollers, 18a through 18d. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include three upper sheet ejecting rollers, as taught by JP '355, in the sheet apparatus of JP '039 in order to ensure that the sheet is properly guided around the lower sheet ejecting roller, and that the leading edge does not curl up.

Regarding claim 2, the JP '039 reference teaches that part or all of the portions of the upper sheet ejecting roller are displaced from one another upstream or downstream in the sheet transport direction, see figures 5 and 6.

Regarding claim 4, the JP '039 patent teaches that the rollers of the upper sheet ejecting roller are arranged symmetrically in relation to a center line of the sheet transport path, see figure 3.

Regarding claim 5, the JP '039 reference teaches that the upper sheet ejecting roller includes a plurality of sheet pinch rollers, 37, and a plurality of first lift-preventing rollers, 36. The JP '039 reference does not teach that the number of first lift-preventing rollers is greater than a number of sheet pinch rollers. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to increase the number of first lift-preventing rollers to a number greater than the number of sheet pinch rollers, since it has been held that mere

duplication of the essential working parts of a device involves only routine skill in the art. *St.*

Regis Paper Co. v. Bemis Co., 193 USPQ 8.

Regarding claim 6, the JP '039 does not teach a third set of roller, but the JP '355 reference does, as discussed above with regard to claim 1. Neither the JP '039 reference nor the JP '355 reference teach that the number of sheet pinch roller is greater than the number of second lift-preventing rollers. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to increase the number of sheet pinch rollers to a number greater than the number of second lift-preventing rollers, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St.*

Regis Paper Co. v. Bemis Co., 193 USPQ 8.

Regarding claim 7, the JP '355 reference teaches that the plurality of upper sheet ejecting rollers are all positioned such that second lift-preventing roller, 18d is positioned downstream in a sheet transport direction from the plurality of sheet pinch rollers, 18c, and wherein the plurality of sheet pinch rollers are positioned downstream in a sheet transport direction from the plurality of first lift-preventing rollers, 18b, see figure 5.

Regarding claims 8 and 9, the combination of the JP '039 and JP '355 reference teach the upper ejecting roller which includes three rollers, as discussed above, while the JP '039 reference specifically teaches that the upper ejecting rollers, 36 and 37 are positioned approximately 4 mm apart, see paragraph 0038 of the translation, as provided by the applicant.

Regarding claim 10, neither the JP '039 reference nor the JP '355 reference teaches that the second lift-preventing roller is positioned at the center line of the sheet transport path. However, it would have been obvious to one of ordinary skill in the art at the time the invention

was made to located the second lift-preventing roller on the center line of the sheet transport path, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japiske*, 86 USPQ 70.

Regarding claim 11, the JP '039 reference teaches that the sheet pinch rollers, 37, are arranged between respective two neighboring first lift preventing rollers, 36, see figure 3. Neither the JP '039 reference nor the JP '355 reference specifically teach that the second lift preventing roller is arranged between respective two neighboring sheet pinch rollers, however it would have been obvious to one of ordinary skill in the art at the time the invention was made to locate the second lift preventing roller between two sheet pinch rollers, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japiske*, 86 USPQ 70.

Response to Arguments

Applicant's arguments filed 15 October 2007 have been fully considered but they are not persuasive.

Applicant first argues on page 5 that neither the JP '355 reference nor the JP '039 reference teach the lift preventing roller as recited claim. The applicant specifically refers to the JP '355 reference, stating that the roller 18a through 18d do not ensure that a tail end of the sheet is prevented from being lifted up in an image forming position. First of all, claim 1 does not require that the lift-preventing rollers ensure that a tail end of the sheet is prevented from being lifted up in an image forming position, such a limitation is not explicitly claimed. In addition, the upper rollers 18a through 18d are taught to being in contact with a lower roller, 17a, and by

there mere presence they will serve to press the sheet, and the tail end of the sheet, onto the lower roller, 17a, and prevent it from being lifted up.

Applicant then argues on page 5 that the rollers 18a through 18d are not in direct contact with the lower sheet ejecting roller at respective points in the sheet transport direction, and that the sheet pinch roller, the first lift-preventing roller, and the second lift-preventing roller are not in the same straight line parallel to the sheet transport direction. Regarding the first point, figure 5 clearly shows that the rollers 18a through 18d are in direct contact with the lower sheet ejecting roller at respective points in the sheet transport direction. Regarding the second point, the JP '355 reference was not relied upon to teach the feature of the rollers not being in the same straight line parallel to the sheet transport direction. The JP '039 reference was relied to teach this feature, and this feature is clearly shown in figure 3 of the JP '039 reference.

Finally applicant argues that modifying the JP '039 device with the JP '355 device would render the JP '039 device inoperable and require substantial reconstruction. The examiner is relying on the teaching of more than two upper ejecting rollers in the JP '355 reference to modify the JP '039 reference to include a third upper ejecting roller. The addition of a third upper ejecting roller would merely increase the force on the sheet as it is being conveyed to ensure that the sheet remains in contact with the lower ejecting roller and is properly conveyed, this would not render the device inoperable, nor would it require substantial reconstruction.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAITLIN S. JOERGER whose telephone number is (571)272-6938. The examiner can normally be reached on Monday - Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey can be reached on 571-272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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